

Inventor
Search

L1 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2003 ACS
 ACCESSION NUMBER: 2000:772629 CAPLUS
 DOCUMENT NUMBER: 133:340315
 TITLE: Therapeutic action and properties of a polymorphic form of 5-[4-[2-(N-methyl-N-(2-pyridyl)amino)ethoxy]benzyl]thiazolidine-2,4-dione, maleic acid salt
 INVENTOR(S): Blackler, Paul David James; Browne, Christine Marie; Coakley, Timothy G.; Giles, Robert Gordon; Morrissey, Gillian
 PATENT ASSIGNEE(S): SmithKline Beecham PLC, UK; SmithKline Beecham (Cork) Limited
 SOURCE: PCT Int. Appl., 21 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 INT. PATENT CLASSIF.:
 MAIN: C07D417-12
 SECONDARY: A61K031-44; A61P003-10
 CLASSIFICATION: 63-8 (Pharmaceuticals)
 Section cross-reference(s): 1
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000064896	A1	20001102	WO 2000-GB1520	20000419
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1173435	A1	20020123	EP 2000-920892	20000419
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
BR 2000009932	A	20020409	BR 2000-9932	20000419
JP 2002543077	T2	20021217	JP 2000-614248	20000419
EP 1304330	A2	20030423	EP 2002-80321	20000419
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				
NO 2001005147	A	20011217	NO 2001-5147	20011022
HR 20010772	A1	20021031	HR 2001-772	20011022
BG 106121	A	20020531	BG 2001-106121	20011120
PRIORITY APPLN. INFO.:				
		GB 1999-9473	A	19990423
		GB 1999-12196	A	19990525
		EP 2000-920892	A3	20000419
		WO 2000-GB1520	W	20000419

ABSTRACT:
 A polymorphic form of 5-[4-[2-(N-methyl-N-(2-pyridyl)amino)ethoxy]benzyl]thiazolidine-2,4-dione, maleic acid salt (the "Polymorph") characterized in that it provides: (i) an IR spectrum contg. peaks at 1763, 912, 856 and 709 cm⁻¹; and/or (ii) a Raman spectrum contg. peaks at 1762, 1284, 912 and 888 cm⁻¹; and/or (iii) a solid-state ¹³C NMR spectrum contg. peaks at 111.0, 113.6, 119.8, 129.1, 130.9, 131.8, 134.7, 138.7, 146.5, 152.7, 157.5, 169.5, 171.0, 178.7 ppm; and/or (iv) an x-ray powder diffraction (XRPD) pattern which gives

calcd. lattice spacings at 5.87, 5.30, 4.69, 4.09, 3.88, 3.61, 3.53 and 3.46 Angstroms; a process for prep. such a compd., a pharmaceutical compn. contg. such a compd. and the use of such a compd. in medicine.

SUPPL. TERM: antidiabetic polymorphic thiazolidinedione maleate
INDEX TERM: Antidiabetic agents
IR spectroscopy
NMR spectroscopy
Polymorphism (crystal)
Raman spectroscopy
X-ray diffractometry
(antidiabetic action and properties of polymorphic form
of [(N-methyl-N-(pyridyl)amino)ethoxy]benzyl]thiazolidin
edione maleate)
INDEX TERM: 155141-29-0
ROLE: BAC (Biological activity or effector, except adverse);
BSU (Biological study, unclassified); PRP (Properties); THU
(Therapeutic use); BIOL (Biological study); USES (Uses)
(antidiabetic action and properties of polymorphic form
of [(N-methyl-N-(pyridyl)amino)ethoxy]benzyl]thiazolidin
edione maleate)
REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS
RECORD.
REFERENCE(S): (1) Halebian, J; JOURNAL OF PHARMACEUTICAL SCIENCES 1969,
V58(8), P911 CAPLUS
(2) Smithkline Beecham Plc; WO 9405659 A 1994 CAPLUS
(3) Smithkline Beecham Plc; WO 9855122 A 1998 CAPLUS
(4) Smithkline Beecham Plc; WO 9931093 A 1999 CAPLUS

L1 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2003 ACS
 ACCESSION NUMBER: 2000:772627 CAPLUS
 DOCUMENT NUMBER: 133:340314
 TITLE: Therapeutic action and properties of a polymorphic form of 5-[4-[2-(N-methyl-N-(2-pyridyl)amino)ethoxy]benzyl]thiazolidine-2,4-dione, maleic acid salt
 INVENTOR(S): Blackler, Paul David James; Giles, Robert Gordon; Moore, Stephen; Sasse, Michael John
 PATENT ASSIGNEE(S): SmithKline Beecham PLC, UK
 SOURCE: PCT Int. Appl., 19 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 INT. PATENT CLASSIF.:
 MAIN: C07D417-00
 CLASSIFICATION: 63-8 (Pharmaceuticals)
 Section cross-reference(s): 1
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000064893	A2	20001102	WO 2000-GB1522	20000419
WO 2000064893	A3	20010125		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1175418	A2	20020130	EP 2000-922793	20000419
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
BR 2000009935	A	20020416	BR 2000-9935	20000419
JP 2002543076	T2	20021217	JP 2000-614245	20000419
EP 1277753	A1	20030122	EP 2002-80319	20000419
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				
NO 2001005148	A	20011217	NO 2001-5148	20011022
HR 20010774	A1	20021031	HR 2001-774	20011022
BG 106122	A	20020531	BG 2001-106122	20011120
PRIORITY APPLN. INFO.:			GB 1999-9471	A 19990423
			GB 1999-12195	A 19990525
			EP 2000-922793	A3 20000419
			WO 2000-GB1522	W 20000419

ABSTRACT:

A polymorphic form of 5-[4-[2-(N-methyl-N-(2-pyridyl)amino)ethoxy]benzyl]thiazolidine-2,4-dione, maleic acid salt (the "Polymorph") characterized in that it provides: (i) an infra red spectrum contg. peaks at 1752, 1546, 1154, 621, and 602 cm⁻¹; and/or (ii) a Raman spectrum contg. peaks at 1751, 1243 and 602 cm⁻¹; and/or (iii) a solid-state NMR spectrum contg. peaks at 111.9, 114.8, 119.6, 129.2, 134.0, 138.0, 144.7, 153.2, 157.1, 170.7, 172.0 and 175.0 ppm; and/or (iv) an x-ray powder diffraction (XRPD) pattern which gives calcd. lattice spacings of 6.46, 5.39, 4.83, 4.68, 3.71, 3.63, 3.58, and 3.48 Angstroms; a process for prep. such a compd., a pharmaceutical compn. contg.

such a compd. and the use of such a compd. in medicine.

SUPPL. TERM: antidiabetic polymorphic thiazolidinedione maleate
INDEX TERM: Antidiabetic agents
NMR spectroscopy
Polymorphism (crystal)
Raman spectroscopy
X-ray diffractometry
(antidiabetic action of polymorphic form of
[(N-methyl-N-(pyridyl)amino)ethoxy]benzyl]thiazolidinedi
one maleate)
INDEX TERM: 168553-12-6
ROLE: BAC (Biological activity or effector, except adverse);
BSU (Biological study, unclassified); PRP (Properties); THU
(Therapeutic use); BIOL (Biological study); USES (Uses)
(antidiabetic action of polymorphic form of
[(N-methyl-N-(pyridyl)amino)ethoxy]benzyl]thiazolidinedi
one maleate)

L1 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2003 ACS
 ACCESSION NUMBER: 2000:772626 CAPLUS
 DOCUMENT NUMBER: 133:340313
 TITLE: Therapeutic action and properties of a polymorphic form of 5-[4-[2-(N-methyl-N-(2-pyridyl)amino)ethoxy]benzyl]thiazolidine-2,4-dione, maleic acid salt
 INVENTOR(S): Blackler, Paul David James; Giles, Robert Gordon; Sasse, Michael John
 PATENT ASSIGNEE(S): SmithKline Beecham P.L.C., UK
 SOURCE: PCT Int. Appl., 18 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 INT. PATENT CLASSIF.:
 MAIN: C07D417-00
 CLASSIFICATION: 63-8 (Pharmaceuticals)
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000064892	A2	20001102	WO 2000-GB1514	20000419
WO 2000064892	A3	20010125		
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1173434	A2	20020123	EP 2000-920889	20000419
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
BR 2000009934	A	20020604	BR 2000-9934	20000419
JP 2002543075	T2	20021217	JP 2000-614244	20000419
EP 1284268	A1	20030219	EP 2002-80320	20000419
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				
NO 2001005149	A	20011217	NO 2001-5149	20011022
HR 20010773	A1	20021031	HR 2001-773	20011022
BG 106119	A	20020531	BG 2001-106119	20011120
PRIORITY APPLN. INFO.:			GB 1999-9472	A 19990423
			GB 1999-12197	A 19990525
			EP 2000-920889	A3 20000419
			WO 2000-GB1514	W 20000419

ABSTRACT:

A polymorphic form of 5-[4-[2-(N-methyl-N-(2-pyridyl)amino)ethoxy]benzyl]thiazolidine-2,4-dione, maleic acid salt (the "Polymorph") characterized in that it: (i) provides an IR spectrum contg. peaks at 1360, 1326, 1241, 714 and 669 cm⁻¹; and/or (ii) provides a Raman spectrum contg. peaks at 1581, 768, 670, 271 and 226 cm⁻¹; and/or (iii) provides a solid-state NMR spectrum contg. peaks at chem. shifts substantially; and/or (iv) provides an x-ray powder diffraction (XRPD) pattern contg. peaks; a process for prepg. such a compd., a pharmaceutical compn. contg. such a compd. and the use of such a compd. in medicine.

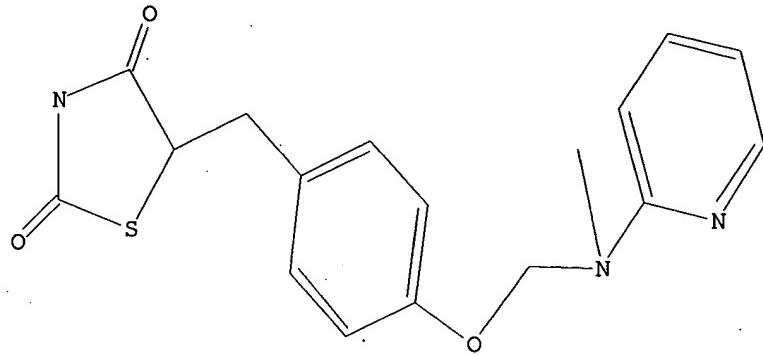
SUPPL. TERM: antidiabetic polymorphic thiazolidinedione maleate
INDEX TERM: Antidiabetic agents
IR spectroscopy
NMR spectroscopy
Polymorphism (crystal)
Raman spectroscopy
X-ray diffractometry
(antidiabetic action of polymorphic form of
[(N-methyl-N-(pyridyl)amino)ethoxy]benzyl]thiazolidinedi
one maleate)
INDEX TERM: 168553-12-6
ROLE: BAC (Biological activity or effector, except adverse);
BSU (Biological study, unclassified); PRP (Properties); THU
(Therapeutic use); BIOL (Biological study); USES (Uses)
(antidiabetic action of polymorphic form of
[(N-methyl-N-(pyridyl)amino)ethoxy]benzyl]thiazolidinedi
one maleate)

<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=>
Uploading 10122812.str

L1 STRUCTURE UPLOADED

=> d 11
L1 HAS NO ANSWERS
L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> s 11
SAMPLE SEARCH INITIATED 09:09:36 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 1 TO ITERATE

100.0% PROCESSED 1 ITERATIONS 0 ANSWERS
SEARCH TIME: 00.00.02

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 1 TO 80
PROJECTED ANSWERS: 0 TO 0

L2 0 SEA SSS SAM L1

=> s 11 sss full
FULL SEARCH INITIATED 09:09:46 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 6 TO ITERATE

100.0% PROCESSED 6 ITERATIONS 0 ANSWERS
SEARCH TIME: 00.00.01

L3 0 SEA SSS FUL L1

=> s 5-[4-[2-(N-methyl-N-(2-pyridyl)amino)ethoxy]benzyl]thiazolidine-2,4-dione,
maleic acid
MISSING OPERATOR '5-[4-[2-(N-METHYL-N'

=> s "5-[4-[2-(N-methyl-N-(2-pyridyl)amino)ethoxy]benzyl]thiazolidine-2,4-dione"
L4 1 "5-[4-[2-(N-METHYL-N-(2-PYRIDYL)AMINO)ETHOXY]BENZYL]THIAZOLIDINE

-2,4-DIONE"

=> file caplus
COST IN U.S. DOLLARS

FULL ESTIMATED COST

SINCE FILE ENTRY	TOTAL SESSION
208.03	208.24

FILE 'CAPLUS' ENTERED AT 09:11:20 ON 01 JUL 2003
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 1 Jul 2003 VOL 139 ISS 1
FILE LAST UPDATED: 30 Jun 2003 (20030630/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 14
L5 592 L4

=> s 15 and polymorph?
L6 6 L5 AND POLYMORPH?

=> d ibib abs hitstr tot

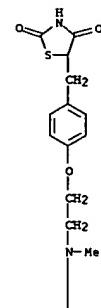
L6 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2003 ACS
 ACCESSION NUMBER: 2003:434558 CAPLUS
 DOCUMENT NUMBER: 139:12309
 TITLE: Rosiglitazone edisylates and their use as antidiabetics
 INVENTOR(S): Ho, Tim Chien Ting; Millan, Michael John
 PATENT ASSIGNEE(S): SmithKline Beecham P.L.C., UK
 SOURCE: PCT-Int. Appl., 36 pp.
 CODEN: PIKKDZ
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003045947	A1	20030605	WO 2002-GB5239	20021121
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MA, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
PRIORITY APPLN. INFO.:		GB 2001-27931	A 20011121	
		GB 2001-27932	A 20011121	
		GB 2001-27933	A 20011121	

AB A salt of 5-[4-(2-(N-methyl-N-(2-pyridyl)amino)ethoxy)benzyl]thiazolidine-2,4-dione and 1,2-ethanesulfonic acid, a process for the prepn. of the salt, pharmaceutical compns. comprising the salt and the use of the salt in medicine as antidiabetics are described.
 IT 122320-73-4, Rosiglitazone
 RI: RCT (Reactant); RACT (Reactant or reagent)
 (prepn. and properties of rosiglitazone edisylate polymorphs
 as antidiabetics)
 RN 122320-73-4 CAPLUS
 CN 2,4-Thiazolidinedione, 5-[(4-(2-(methyl-2-pyridinylamino)ethoxy)phenyl)methyl]- (9CI) (CA INDEX NAME)

L6 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2003 ACS (Continued)

PAGE 1-A



PAGE 2-A



REFERENCE COUNT:

3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

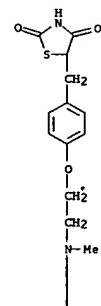
L6 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2003 ACS
 ACCESSION NUMBER: 2003:434557 CAPLUS
 DOCUMENT NUMBER: 139:12309
 TITLE: Preparation of polymorphs of 5-(4-(2-(N-methyl-N-(2-pyridyl)amino)ethoxy)benzyl)thiazolidine-2,4-dione benzenesulfonate for pharmaceuticals
 INVENTOR(S): Craig, Andrew Simon; Millan, Michael John
 PATENT ASSIGNEE(S): SmithKline Beecham P.L.C., UK
 SOURCE: PCT-Int. Appl., 47 pp.
 CODEN: PIKKDZ
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003045946	A1	20030605	WO 2002-GB5232	20021121
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MA, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
PRIORITY APPLN. INFO.:		GB 2001-27934	A 20011121	
		GB 2001-27935	A 20011121	
		GB 2001-27936	A 20011121	
		GB 2001-27937	A 20011121	

AB A 5-[4-(2-(N-methyl-N-(2-pyridyl)amino)ethoxy)benzyl]thiazolidine-2,4-dione benzenesulfonate (I) or a solvate, a process for the prepn. of the salt, and pharmaceutical compns. comprising the salt are disclosed. A mixt. of THF and 5-(4-(2-(N-methyl-N-(2-pyridyl)amino)ethoxy)benzyl)thiazolidine-2,4-dione was heated to 50 degrees, and treated with benzenesulfonic acid was added to the soln. to give I. I was characterized by spectroscopic and X-ray methods.
 IT 122320-73-4, 5-(4-(2-(N-methyl-N-(2-pyridyl)amino)ethoxy)benzyl)thiazolidine-2,4-dione
 RI: RCT (Reactant); RACT (Reactant or reagent)
 (prepn. of polymorphs of methyl(pyridyl)aminoethoxybenzylthiazolidinedione salt for pharmaceuticals)
 RN 122320-73-4 CAPLUS
 CN 2,4-Thiazolidinedione, 5-[(4-(2-(methyl-2-pyridinylamino)ethoxy)phenyl)methyl]- (9CI) (CA INDEX NAME)

L6 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2003 ACS (Continued)

PAGE 1-A



PAGE 2-A



REFERENCE COUNT:

5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

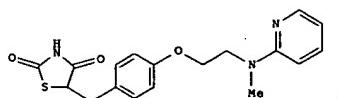
L6 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2002:504785 CAPLUS
DOCUMENT NUMBER: 137:83621

TITLE: Preparation and use of 5-[4-(2-(N-methyl-N-(2-pyridyl)amino)ethoxy)benzyl]thiazolidine-2,4-dione methanesulfonate
INVENTOR(S): Craig, Andrew Simon; Ho, Tim Chien Ting; Millan, Michael; O'Keeffe, Deirdre
PATENT ASSIGNEE(S): SmithKline Beecham P.L.C., UK
SOURCE: PCT Int. Appl., 41 pp.
CODEN: PIKK02

DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002051839	A1	20020704	WO 2001-G85751	20011221
V: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZB, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, RV: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GO, GW, ML, MR, NE, SN, TD, TG				
PRIORITY APPLN. INFO.:			GB 2000-31521	A 20001222
			GB 2000-31524	A 20001222
			GB 2000-31526	A 20001222
			GB 2000-31528	A 20001222

GI



AB A compd. 5-[4-(2-(N-methyl-N-(2-pyridyl)amino)ethoxy)benzyl]thiazolidine-2,4-dione (I) methanesulfonate salt (II) or solvate thereof; a process for prep. I, a compn. comprising I and its therapeutic use is disclosed. Four polymorphic forms were prep'd. and characterized. For instance, MeOH (0.54 mL) was added to a mixt. of I (3.0 g) in EtOAc (60 mL) and was heated with agitation to reflux to give a suspension. The resulting mixt. was cooled to 21 degree C, the solid formed collected by filtration, washed with EtOAc and dried under vacuum for 16 h (3.73 g yield). Polymorphic forms I-IV were characterized by at least one of the following means: aq. solv., m.p., ¹H-NMR (soln.), ¹³C-NMR (solid state), IR/Raman spectra, XRPD and DSC. II is a stable solid with

L6 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2002:256258 CAPLUS
DOCUMENT NUMBER: 136:29968

TITLE: Novel polymorphic forms of 5-[4-(2-(N-methyl-N-(2-pyridyl)amino)ethoxy)benzyl]thiazolidine-2,4-dione maleate and process for their preparation
INVENTOR(S): Chilayyan, Prabhakar; Mamillapalli, Ramabhadra Sarma; Keishnamurthy, Vyasa Seela; Vishnuvardhan Reddy; Gaddam, Om Reddy
PATENT ASSIGNEE(S): Reddy's Research Foundation, India; Cord, Janet I.
SOURCE: PCT Int. Appl., 40 pp.
CODEN: PIKK02

DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002026737	A1	20020404	WO 2001-US29996	20010925
V: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZB, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, RV: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GO, GW, ML, MR, NE, SN, TD, TG				
AU 2001091232	A5	20020408	AU 2001-91232	20010925
PRIORITY APPLN. INFO.:			IN 2000-WA805	A 20000926
			WO 2001-US29996	V 20010926

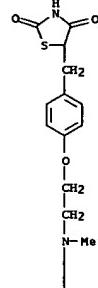
AB This invention relates to novel polymorphic/pseudopolymorphic forms of 5-[4-(2-(N-methyl-N-(2-pyridyl)amino)ethoxy)benzyl]thiazolidine-2,4-dione maleate (I). The invention also relates to a pharmaceutical compn. comprising the novel polymorphic form or their mixt. and a pharmaceutically acceptable carrier. The polymorphic forms of the present invention are more active, as antidiabetic agent, than the hitherto known 5-[4-(2-(N-2-methyl-N-(2-pyridyl)amino)ethoxy)benzyl] thiazolidine-2,4-dione maleate. I was dissolved in ethanol and was allowed to cool to room temp. over a period of 18 h to yield 80% of >99% pure polymorphic form of I.

IT 122320-73-4
RL: RCT (Reactant); RACT (Reactant or reagent)
(novel polymorphic forms of triazolidinedione maleate and process for their prep'n.)
RN 122320-73-4 CAPLUS
CN 2,4-Thiazolidinedione, 5-[(4-(2-(methyl-2-pyridinylamino)ethoxy)phenyl)methyl]- (9CI) (CA INDEX NAME)

L6 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2003 ACS (Continued)
good water solv., desirable flow properties and is amenable to large scale processing (filling). II is useful for the prevention/treatment of diabetes mellitus.

IT 122320-73-4, 5-[(4-(2-(N-Methyl-N-(2-pyridyl)amino)ethoxy)benzyl)thiazolidine-2,4-dione
RL: RCT (Reactant); RACT (Reactant or reagent)
(reactant, prep., and characterization of 5-[4-(2-(N-Methyl-N-(2-pyridyl)amino)ethoxy)benzyl]thiazolidine-2,4-dione methanesulfonate)
RN 122320-73-4 CAPLUS
CN 2,4-Thiazolidinedione, 5-[(4-(2-(methyl-2-pyridinylamino)ethoxy)phenyl)methyl]- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A

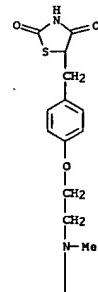


REFERENCE COUNT:

2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2003 ACS (Continued)

PAGE 1-A



PAGE 2-A



REFERENCE COUNT:

6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2003 ACS
 ACCESSION NUMBER: 2001:724003 CAPLUS
 DOCUMENT NUMBER: 136:79548

TITLE: Inhibition of RXR and PPAR. γ . ameliorates diet-induced obesity and type 2 diabetes
 AUTHOR(S): Yamauchi, Toshiyuki; Waki, Hironori; Kamon, Junji;
 Murakami, Koji; Motojima, Kiyoto; Komeda, Kajuro;
 Miki, Hiroshi; Kubota, Naoto; Terauchi, Yasuo;
 Tsuchida, Atsuko; Tsuboyama-Kasaoka, Nobuyor; Yamauchi,
 Naoko; Ide, Tomohiro; Horii, Tataru; Kato, Shigeaki;
 Fukayama, Masashi; Akanuma, Yasuo; Ezaki, Osamu; Itai,
 Akiko; Nagai, Ryozo; Kizuka, Satoshi; Tobe, Kazuyuki;
 Kagechika, Hiroyuki; Shudo, Koichi; Kadokawa, Takashi

CORPORATE SOURCE: Department of Internal Medicine, Graduate School of Medicine, University of Tokyo, Tokyo, 113-0655, Japan
 SOURCE: Journal of Clinical Investigation (2001), 108(7), 1001-1013
 CODEN: JCINAO; ISSN: 0021-9738

PUBLISHER: American Society for Clinical Investigation
 DOCUMENT TYPE: Journal
 LANGUAGE: English

AB PPAR. γ . is a ligand-activated transcription factor and functions as a heterodimer with a retinoid X receptor (RXR). Supraphysiolog. activation of PPAR. γ . by thiazolidinediones can reduce insulin resistance and hyperglycemia in type 2 diabetes, but these drugs can also cause wt. gain. Quite unexpectedly, a moderate redn. of PPAR. γ . activity obstd. in heterozygous PPAR. γ .-deficient mice or the Pro12Ala polymorphism in human PPAR. γ ., has been shown to prevent insulin resistance and obesity induced by a high-fat diet. In this study, we investigated whether functional antagonism toward PPAR. γ ./RXR could be used to treat obesity and type 2 diabetes. We show herein that an RXR antagonist and a PPAR. γ . antagonist decrease triglyceride (TG) content in white adipose tissue, skeletal muscle, and liver. These inhibitors potentiated leptin's effects and increased fatty acid combustion and energy dissipation, thereby ameliorating H₂O diet-induced obesity and insulin resistance. Paradoxically, treatment of heterozygous PPAR. γ .-deficient mice with an RXR antagonist or a PPAR. γ . antagonist depletes white adipose tissue and markedly decreases leptin levels and energy dissipation, which increases TG content in skeletal muscle and the liver, thereby leading to the re-emergence of insulin resistance. Our data suggested that appropriate functional antagonism of PPAR. γ ./RXR may be a logical approach to protection against obesity and related diseases such as type 2 diabetes.

IT 122320-73-4, Rosiglitazone

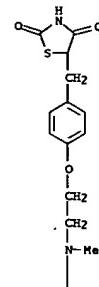
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (inhibition of RXR and PPAR. γ . ameliorates diet-induced obesity and type 2 diabetes)

RN 122320-73-4 CAPLUS

CN 2,4-Thiazolidinedione, 5-[(4-[2-(methyl-2-pyridinylamino)ethoxy]phenyl)met hyl]- (9CI) (CA INDEX NAME)

L6 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2003 ACS (Continued)

PAGE 1-A



PAGE 2-A



REFERENCE COUNT:

55

THERE ARE 55 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 6 OF 6 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1999:437778 CAPLUS

DOCUMENT NUMBER: 131:197757

TITLE: Loss-of-function mutations in PPAR. γ . associated with human colon cancer

AUTHOR(S): Sarral, Pasha; Mueller, Elisabetta; Smith, Wendy M.; Wright, Harold M.; Kurn, Jennifer B.; Aaltonen, Lauri A.; De la Chapelle, Albert; Spiegelman, Bruce M.; Eng, Charis

CORPORATE SOURCE: Department of Cancer Biology Dana-Farber Cancer Institute Department of Cell Biology, Harvard Medical School, Boston, MA 02115, USA

SOURCE: Molecular Cell (1999), 3(6), 799-804

CODEN: MOCEFL; ISSN: 1097-2765

PUBLISHER: Cell Press

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The gamma isoform of the peroxisome proliferator-activated receptor, PPAR. γ ., regulates adipocyte differentiation and has recently been shown to be expressed in neoplasia of the colon and other tissues. The authors have found four somatic PPAR. γ . mutations among 55 sporadic colon cancers: one nonsense, one frameshift, and two missense mutations. Each greatly impaired the function of the protein. C.472delA results in deletion of the entire ligand binding domain. Q286L and K319X retain a total or partial ligand binding domain but lose the ability to activate transcription through a failure to bind to ligands. R288H showed a normal response to synthetic ligands but greatly decreased transcription and binding when exposed to natural ligands. These data indicate that colon cancer in humans is assoccd. with loss-of-function mutations in PPAR. γ .

IT 122320-73-4, BRL 49653

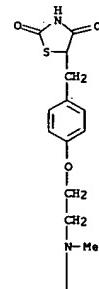
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (loss-of-function mutated PPAR. γ . assoccd. with human colon cancer binding of and transactivation response to)

RN 122320-73-4 CAPLUS

CN 2,4-Thiazolidinedione, 5-[(4-[2-(methyl-2-pyridinylamino)ethoxy]phenyl)methyl]- (9CI) (CA INDEX NAME)

L6 ANSWER 6 OF 6 CAPLUS COPYRIGHT 2003 ACS (Continued)

PAGE 1-A



PAGE 2-A



REFERENCE COUNT:

28

THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

10/030,877

Page 8

=> log y

COST IN U.S. DOLLARS

SINCE FILE

ENTRY

TOTAL

SESSION

FULL ESTIMATED COST

29.36

237.60

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

ENTRY

TOTAL

SESSION

CA SUBSCRIBER PRICE

-3.91

-3.91

STN INTERNATIONAL LOGOFF AT 09:12:01 ON 01 JUL 2003

Habte

7/01/2003

L Number	Hits	Search Text	DB	Time stamp
2	1249	546/269.7, 514/342	USPAT	2003/07/01 15:28
3	18717	polymorph\$	USPAT	2003/07/01 15:28
5	1363	polymorph\$.clm.	USPAT	2003/07/01 15:28
7	683	546/269.7, 514/342 and malic\$	USPAT	2003/07/01 15:28
4	58	(546/269.7, 514/342) and polymorph\$	USPAT	2003/07/01 15:28
6	8	(546/269.7, 514/342) and polymorph\$.clm.	USPAT	2003/07/01 15:28
8	36	(546/269.7, 514/342 and malic\$) and polymorph\$	USPAT	2003/07/01 15:28